

NATURAL RESOURCES CONSERVATION SERVICE

VIRGINIA CONSERVATION PRACTICE STANDARD

PASTURE PLANTING FOR GRAZING AND MECHANICAL HARVEST

(Acre)

Code 512

DEFINITION

Establishing native or introduced forage species.

PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

- establish adapted and compatible species, varieties, or cultivars
- improve or maintain livestock nutrition and/or health
- extend the length of the grazing season
- redistribute forage availability within the grazing season
- provide emergency forage production
- reduce soil erosion by wind and/or water
- improve water quality by reducing runoff.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on cropland, hayland, pastureland, and other agricultural lands where forage production is feasible and desired.

CRITERIA

GENERAL CRITERIA

Plant species and their cultivars shall be selected based upon:

- climatic conditions such as rainfall amount, seasonal rainfall patterns, growing season length, humidity levels, temperature extremes, and the USDA Plant Hardiness Zones
- soil condition and position attributes such as pH, available water holding capacity, aspect, drainage class, inherent fertility, and flooding and ponding
- plant resistance to disease and insects common to the site or location
- plant compatibility with other forage species and their selected cultivar(s) in rate of establishment, maturity, and growth habit when seeded together as a forage mixture
- planned use of the planted forage (producer goals).

Specified seeding/plant material rates, methods of planting and date of planting shall be consistent with the *Plant Establishment Guide for Virginia*.

Seeding rates will be calculated on a pure live seed (PLS) basis or percent germination.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Provide a firm, weed free seedbed that ensures seed will contact the soil uniformly and that facilitates seeding emergence, and provides a medium that does not restrict roots or allow roots to become dry.

Use conservation and no-till planting methods to establish forage plants on land subject to erosion, and/or to conserve moisture and organic matter present in the soil.

Apply all plant nutrients according to a soil test. Required lime shall be applied at least six months (conventional planting) and at least twelve months (no-till) prior to seeding. Subsequent nutrient management will be according to a Nutrient Management Plan.

Legume seed shall be inoculated with proper, viable rhizobia before planting.

All seed and planting materials shall be labeled and meet or exceed Virginia seed quality law standards for germination, purity, and noxious weed seed limitations.

For pesticide and herbicide use with planting, contact the Extension Service for current information and recommendations.

ADDITIONAL CRITERIA FOR IMPROVING OR MAINTAINING LIVESTOCK NUTRITION AND/OR HEALTH

Forage species must be capable of meeting the desired level of nutrition (quality and quantity) for the kind and class of the livestock to be fed.

ADDITIONAL CRITERIA FOR EXTENDING THE GRAZING SEASON

Forage species selected for establishment shall fulfill a recognized dietary deficiency with the year long forage management program.

CRITERIA FOR PROVIDING EMERGENCY FORAGE PRODUCTION

Select plants that will produce forage for use during periods when other on-farm forage is unavailable to meet livestock needs.

CRITERIA FOR REDUCING EROSION BY WIND AND/OR WATER

Plants shall have the ability to provide adequate ground cover, canopy cover, root mass, and vegetal retardance to wind forces and water flows either alone or in combination with other forage species when site conditions require erosion protection.

CONSIDERATIONS

Virginia Conservation Practice Standards *Prescribed Burning (Code 338)*, *Prescribed Grazing (Code 528A)* and *Brush Management (Code 314)* may be used in combination with *Pasture Planting for Grazing and Mechanical Harvest*.

Where wildlife management is an objective, the food and cover value of the planting can be enhanced by using an approved habitat evaluation procedure to aid in selecting plant species and providing for other habitat requirements necessary to achieve the objective.

Forage species planted in mixtures should exhibit similar palatability to one another to avoid spot or selective grazing.

PLANS AND SPECIFICATIONS

Specifications for the establishment of pasture and hayland plantings shall be prepared for each site or management unit according to the Criteria, Considerations, and Operations and Maintenance described in this standard, and shall be recorded on specification sheets, in narrative statements in the conservation plan, or other acceptable documentation.

OPERATION AND MAINTENANCE

Growth of seedlings or sprigs shall be monitored for water stress. Water stress may require reducing weeds, early harvest of any companion crop(s), irrigation when possible, or replanting failed stands, depending on the severity of the drought.

Invasion by undesirable plants shall be controlled by cutting, using a selective herbicide, or with grazing management by manipulating livestock stocking rates, density, and duration of stay.

Insects and diseases shall be controlled when an infestation threatens stand survival.

REFERENCES

1. *Plant Establishment Guide for Virginia*, Virginia Natural Resources Conservation Service.
2. Agronomy Handbook, Publication 424-100, Revised 2000, Virginia Cooperative Extension, Virginia Tech.
3. Forages, Fifth Edition, 1995, Volumes I and II, edited by R. F. Barnes, D. A. Miller, and C. J. Nelson; Ames, IA.
4. Southern Forages, First Edition, 1991. D. M. Ball, D. S. Hoveland, and G. D. Lacefield. Potash and Phosphate Institute and the Foundation for Agronomic Research, Norcross, GA.

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Approved Practice Narratives

(Acre)

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512 D1 Pasture Planting for Grazing and Mechanical Harvest: The forage(s) will be established for pasture and/or hay use at proper seeding dates, rates, and depths. Care will be taken not to overgraze the new stand and to control weeds to ensure establishment. Fertility recommendations from a soil test will be followed.

512 D3 Pasture Planting for Grazing and Mechanical Harvest: Renovation of Existing Forage(s) - Existing forage(s) will be renovated with similarly acceptable and compatible species to improve quantity, quality, and distribution.

512 D2 Pasture Planting for Grazing and Mechanical Harvest: The forage(s) planted will improve forage distribution over the length of the grazing season.

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